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NEWSLETTER

Introduction of the World Organization for Science Literacy (Preparatory)

As part of its efforts to promote international exchanges and cooperation, participate in crafting the international agenda on science literacy, and create a channel for people-to-people science and cultural exchanges, the China Association for Science and Technology (CAST) has been engaged in various endeavors to promote public science literacy since 2018.

It seeks to boost China's strength, soft power, and circle of friends through science popularization work to help build a global community of shared futures and meet the United Nations Sustainable

Development Goals (SDGs). CAST is now leading efforts to set up the World Organization for Science Literacy (WOSL) in partnership with more than 20 science and technology organizations in Asia, Europe, Oceania and Africa. WOSL plans to be an international non-profit organization with headquarters in China's capital Beijing.

Background and progress

In 2018, CAST officially launched "Action for Promoting Public Science Literacy Across the World," an exchange and cooperation mechanism designed to promote public science literacy through joint discussion, collaboration, and sharing. The program is highly sig-

nificant for China in terms of building its model of promoting public science literacy and meeting its people's growing needs for a better life. It is also a way for China to raise global public science literacy, fulfill its international responsibility with Chinese wisdom, build a global community of shared future, and promote sustainable development.

The Action includes five tasks:

- 1) establish an organization to promote public science literacy around the world;
- 2) host a World Conference on Science Literacy;
- 3) release the Beijing Declaration for Promoting Public Science Literacy Across the World;

4) create a dedicated website and a dedicated journal for public science literacy globally;

5) collaborate and share practices of international science popularization.

The Action has been progressing well since it began in 2018. During this time, CAST has hosted four consecutive World Conferences on Science Literacy and achieved notable results.

☆ 2018

The 2018 World Conference on Science Literacy was attended by officials and representatives of 58 national science and technology organizations and institutions from 38 countries and regions and by 23

international organizations. The Beijing Declaration for Promoting Public Science Literacy Across the World, released at the conference, called on all stakeholders to work towards stronger and more effective institution-building through discussion and collaboration and carry out close international exchanges and cooperation.

☆ 2019

In 2019, following close consultations and discussions on equal footing, 19 international science and technology organizations from 18 countries adopted the Statutes of the World Organization for Science Literacy, signed a Memorandum of Understanding for Round Table Meeting, and released the “Beijing

Action Roadmap,” a document that laid the groundwork for the design of WOSL.

☆ 2020

In 2020, CAST and 18 other science and technology organizations officially established the Preparatory Committee for WOSL, which marked a milestone in efforts to promote public science literacy around the world and a key point of progress in the preparations to launch WOSL.

☆ 2021

The 2021 Conference officially released the Assessment Index Framework of Civic Science Literacy, another groundwork document to expand international cooperation and exchanges in science popularization.

The Secretariat of the WOSL, which is currently based at the China Research Institute for Science Popularization (CRISP), has carried out a series of exchange and co-operation programs with 26 member organizations of the Preparatory Committee to share popular science resources for pandemic emergency aid, assessment practices, and research of science literacy. More exchange programs are in the pipeline to focus on science and technology education for youth, construction and operation of science museums, and talent training on science popularization.

Purpose

WOSL seeks to promote positive interaction between science

and technology and society at the broadest level. With science and technology penetrating every aspect of our lives at unprecedented speed and scale, it is increasingly turning society into a community with a shared future. While science and technology can push societal progress and enrich minds, it also creates risks and uncertainties that cannot be overlooked. The science community must abide by strict integrity and ethical standards to ensure full understanding and participation of the public and maximize the value of science and the overall and long-term interest of humanity.

WOSL takes its mission and responsibilities to heart. Science literacy is an intrinsic

requirement for a person to achieve all-around development, the social foundation for a nation to achieve innovative capabilities and sustainable development, and the ideological underpinning for a society to build tolerance, understanding and inclusiveness. Science literacy entails a good understanding of scientific knowledge and methods, and it is also reflected in respect for scientific spirit and thought. Improving science literacy is vitally important to the future of a person and a nation alike. It kindles the wisdom and capability to overcome risks and challenges to jointly build a prosperous world.

WOSL is working with its partners to bridge gaps in science

literacy. Given the global imbalance of public science literacy and weaknesses in international exchange and cooperation mechanisms, it is imperative to raise public science literacy and provide people access and opportunities for development. All countries should expand efforts to popularize scientific education, eliminate barriers impeding sharing of science knowledge, narrow the knowledge and development gaps, and contribute to global sustainable development.

WOSL seeks to provide fair and equitable access to science resources. All people should have access to science education and the right to enjoy modern civilization irrespective of their or-

igins or social group. WOSL will do all it can to protect and stimulate young people's passion for science, help the poorest groups narrow the gap in science literacy, dissolve the shackles of poverty, and empower women with the dignity nurtured by science literacy.

Major tasks

Guided by the strategic goals of promoting public science literacy and humanity's all-around development while serving the UN SDGs and building a global community of shared future, WOSL will work to build and expand platforms for exchanges and cooperation through joint action and programs. Its specific tasks include:

First, encourage more

countries, organizations, institutions, and experts to participate in public science literacy work and work with the UN, its agencies, and other intergovernmental organizations and non-governmental organizations, to set the agenda at the UN and exchange results on relevant research.

Second, build an international platform for public science literacy, cement the World Conference on Science Literacy as a regular event, and operate a dedicated website to communicate relevant policy information, the latest academic research results, and best practices to raise public science literacy.

Third, carry out science exchanges and cooperation, both bilaterally and multi-

laterally, with special focus on science education for the youth, surveys and research of public science literacy, education at science museums, and sharing of emergent popular science resources in the form of competitions, workshops and academic exchange.

Fourth, give recognition and awards to organizations and individuals that make important contributions to global public science literacy and inspire involvement from more government officials, scientists and media workers in this endeavor.

Official website

For detailed information on WOSL (Preparatory) and the World Conference on

Science Literacy, visit the official website at: https://www.wosl.org.cn/index_en

WOSL Developments

Three new member organizations join the Preparatory Committee of the World Organization for Science Literacy

From January-April 2022, the Preparatory Committee of the World Organization for Science Literacy (WOSL) welcomed three new members. They were *Ciência Viva* (the Portuguese National Agency for Scientific and Technological Culture), the German Agricultural Society (DLG), and the Hong Kong Productivity Council (HKPC). As influential

national and regional science and technology organizations, each plays a distinctive role in the dissemination of science and technology and in raising public science literacy in their respective countries and regions. At present, 26 member organizations have joined the Preparatory Committee of WOSL, representing 23 countries in Asia, Europe, Africa, and Oceania.

Introduction of new member organizations

Ciência Viva, the Portuguese National Agency for Scientific and Technological Culture, was created in 1996 to promote public awareness of science and technology and science education at a national level, with a particular emphasis on young

people. The Agency promotes and supports science education projects at school and provides internships for secondary school students to work in research laboratories during holidays. It also organizes a widespread campaign of science activities for the public each summer. Since 2002, Ciência Viva has participated in more than 30 European programs to improve science awareness, science education, and virtual/digital sharing of scientific resources.

葡萄牙国家科技文化局

创建于1996年，是葡萄牙科学技术文化机构，其宗旨是在葡萄牙全国范围内提升公众（尤其是青少年）对科学技术重要性的认识，致力于促进和支持学校的科学教育项目，在假期向中学生提供研究实验室实习机会，并为公众提供暑期科学活动。自2002年以来，葡萄牙国家科技文化局参与了30多个欧洲项目，致力于科学意识、科学教育、科学资源虚拟化/数字化共享等工作。



The German Agricultural Society (DLG), founded in 1885, is a leading German food and agricultural organization dedicated to advancing the boundaries of agricultural technology and science. Among its over 30,000 members, many are experts with international expertise. DLG has also established partnerships with many in-

德国农业协会

创建于1885年，是德国农业和粮食部门的主要组织，致力于促进农业技术和科学水平进步的研究。德国农业协会有3万多名会员，主要是具备国际专业知识的专家，并与会员所属机构建立了合作伙伴关系。德国农业协会专注的核心领域有农业交易会、质量测试和研究工作，在农业领域主办两个非常重要的活动，分别是德国国际农业机械展览会和德国国际畜牧展，均为世界排名第一的专业贸易展览会。



stitutions its members serve. It specializes in agricultural and food know-how, exhibitions, and certified agricultural machinery quality and food testing. It hosts Agritechnica and EuroTier, the two most prestigious agricultural trade fairs in the world.

The Hong Kong Productivity Council (HKPC) is a multi-disciplinary organization established by statute in 1967 to promote productivity excellence through relentless drive of world-class advanced technologies and innovative service offerings to support Hong Kong enterprises. A key enabler of Industry 4.0 and Enterprise 4.0, HKPC strives to facilitate Hong Kong's reindustrialization and bolster its abilities to become

an international innovation and technology hub and smart city.

香港生产力促进局

成立于1967年，专业技术和知识涵盖多个不同范畴，致力于以世界级的先进技术和创新服务驱动香港企业提升卓越生产力。香港生产力促进局作为科技创新、应用科技和价值创造的赋能者及促进者，利用工业4.0和企业4.0，加速香港再工业化发展；同时致力发展智能及绿色生活应用技术，全面促进中国香港成为国际创新科技中心及智慧城市。



hkpc
生產力局

The Preparatory Committee of the World Organization for Science Literacy holds its first meeting in 2022



Participants of the First Meeting of the Preparatory Committee of the World Organization for Science Literacy take a group photo online

On April 20, 2022, the Preparatory Committee of the World Organization for Science Literacy (WOSL) held its first 2022 meeting online. The gathering was attended by 25 Committee Members and the Committee Secretary-General and chaired by Meng Qinghai, Chair of the Preparatory Committee of WOSL and Vice President and Executive Secretary of the Secretariat of CAST. Other relevant organizations, including the Department of Science Popularization, the Department of International Affairs, the Chil-

dren and Youth Science Center, the China Science and Technology Research Institute, the China Science and Technology Museum, and the Secretariat of CAST, sent representatives to the meeting.

The meeting reviewed and unanimously approved the 2022 work plan of the Preparatory Committee, now in its second year. The plan listed major exchange programs to be organized by WOSL (preparatory) for the year with the view to expand the scope and scale of cooperation and exchanges under various bilateral and multilateral frameworks. A total of nine programs in five categories were planned to build public science literacy and serve the needs of different countries and regions.

WOSL Member News

Messages

Practical Solutions from WOSL are expected to speed up the development of Africa.

–Mebarek Boukaba,
Hon. President of
National Union of Algerian Scientists and Technologists

Communication is, at its core, a bridge between people—a way to convey understanding, share perspective, and build compassion. We hope that the whole WOSL community will help build these bridges and join us in striving for a better future.

– Tom Carruther,
Co-president of Australian Science Communicators

Italian Contest for

Young Scientists held in Milan



Participants of the 34th Italian Contest for Young Scientists pose for a group photo.

On April 9-11, 2022, the 34th Italian Contest for Young Scientists (I giovani e le scienze 2022) was held in Milan, Italy, for students aged 14-19. This year's contest investigated environmental issues, life sciences, and biochemistry, with a focus on the growing attention young people put on sustainability, health, and environmental protection. A total of 67 contestants brought 28 projects to the final round. The highest scoring team will represent Italy and compete at the EU-CYS-EU Contest for Young Scientists to be held in September in the Netherlands.

The contest brought young people closer to science and research, encouraged them to undertake scientific careers, developed their creativity, fueled a spirit of innovation and collaboration in Italy and international contexts, and improved participants' understanding of the importance of research as a propeller of social development.

The next contest is expected to be held in March 2023.

(By Federation of Associations for Science and Technology of Italy)

Kazakhstan kicks off training workshops to raise public science literacy

From February 7 to April 23, 2022, Kazakhstan organized a series of science literacy workshops for teachers from the country's primary and secondary schools.

The workshop, entitled "Working with Big Ideas of Scientific Education," was informed by a book of the same name. The training gave participants practical information on major pro-



The author's course "Scientific literacy: Working with Big Ideas of Scientific Education" contains information about international organizations such as IAP SEP, WOSL, TWAS, UNESCO and ECOSF, whose activities are aimed at popularizing science, encouraging scientific creativity of children and the development of scientific education.

Participants at the "Working with Big Ideas of Scientific Education" workshop

grams and international organizations dedicated to public science literacy, including the Science Education Programme (SEP) of the InterAcademy Partnership (IAP), the World Organization for Science Literacy (WOSL) (Preparatory), the World Academy of Sciences (TWAS), the United Nations Educational, Scientific and Cultural Organization (UNESCO), and the ECO Science Foundation (ECOSF). It trained teachers to organize their courses and design various science activities to tap into the creativity of their students. It also equipped them with practical skills to apply the principles and methods proposed in the book in response to the characteristics of their students.

A total of 183 people participated in the workshop, including 32 students and 151 teachers.

(By International Center of Scientific Collaborations, Kazakhstan)

CAST holds first online empowerment training workshop for rural women leaders

In celebration of International Women’s Day on March 8, 2022, the Rural Special Technology Service Center of CAST held its first online empowerment workshop for women leaders titled “Science Lessons for Moms & Technology for Rural Revitalization.”

At the workshop, Zheng Mingjie, Deputy Director of the Rural Special Technology Service Center of CAST, said that women play an important role in advancing the mod-

ernization of agriculture and rural areas and in boosting rural revitalization. The 100-plus women participants of the workshop were all exemplars in their dedication to serving their communities. Zheng predicted them to lead more rural women to a prosperous life and embrace rural revitalization fueled by science and technology.

(By Rural Technology Service Center of CAST)



Participants studying at the workshop

Malaysia plans to launch the National Planetary Health Action Plan (PTKPN)



Prime Minister of Malaysia Datuk Seri Ismail Sabri Yaakob announced a decision to roll out the National Planetary Health Action Plan (PTKPN) at the National Science Council (NSC) Meeting.

On April 8, 2022, Prime Minister of Malaysia Datuk Seri Ismail Sabri Yaakob announced a decision to launch the National Planetary Health Action Plan (PTKPN) at the National Science Council (NSC) Meeting. The Plan, designed by the Academy of Sciences Malaysia under the Ministry of Science, Technology & Innovation (MOSTI), was inspired by the needs of science, technology, innovation, and economy (STIE) of Malaysia and is seen as an essential step for the country's progress. It was conceived as the COVID-19 pandemic highlighted a need to maintain interdependence between human, animal and environmental health to ensure universal well-being. A global

health initiative, the Plan will also invite public participation and attract involvement through multiple science awareness campaigns.

Record award haul for HKPC at Special Edition 2022: Invention Geneva Evaluation Days



“SMART PATCH” winning the Gold Medal.

The Hong Kong Productivity Council (HKPC) won a record 38 awards at Special Edition 2022: Invention Geneva Evaluation Days, including 1 Gold Medal with Congratulations of the Jury, 6 Gold Medals, 19 Silver Medals, and 12 Bronze Medals.

The achievement, the biggest haul for any Hong Kong participant, was a sign of the international innovation and technology community recognizing Hong Kong's research and development (R&D) capacity.

The top-winning device, known as “SMART PATCH,” is a virtual worker that can actively

report its working and reporting status. It is a universal Industrial Internet of Things device used for collecting and visualizing real-time production machine data and arranging and executing production orders autonomously based on the machine's ability and readiness. Providing intelligence to machines with minimal effort to achieve machine-to-machine communication can greatly reduce the cost and time of setting up intelligent production equipment and risk of production stoppage due to system malfunction.

(By The Hong Kong Productivity Council)

The Pakistan Science Club (PSC) organizes the Sindh Science Festival

The Pakistan Science Club (PSC) and the Thar Education Alliance jointly organized the Sindh Science Festival at NED University in Pakistan. The two-day event featured various interactive science demonstrations and workshops and drew participation from hundreds of students and teachers across the province. Of the many models and kits displayed at the festival, favorites included Van de Graff generators, astronomical



The Pakistan Science Club and Dreamworld's "Astronomy Night," a live star-gazing and telescope-making workshop

telescopes, solar-powered cars, and windmills. The PSC also selected the most favored projects by students in the categories of education, climate, health, and energy.

(By Pakistan Science Club)

The National Science Foundation Sri Lanka (NSF) unveils the Network of Expatriates in the NSF Global Digital Platform

The National Science Foundation Sri Lanka (NSF) recently announced a state-of-the-art global digital platform (GDP) designed to mobilize expatriates to contribute to Sri Lanka's national development. Developed in collaboration with the Sri Lanka

Association for Software Services Companies (SLASSCOM), the platform can harness the potential of Sri Lanka expatriates and emigrants in higher education, S&T, FDI, trade/exports, tourism, and industry. So far, around 900 Sri Lankan scientists, technologists, and professionals living abroad have registered on the platform.

(By The National Science Foundation Sri Lanka)



The National Science Foundation Sri Lanka (NSF) unveils the Network of Expatriates in the NSF Global Digital Platform.

Abstracts on International Science Popularization

The United Nations holds the 7th International Day of Women and Girls in Science Assembly

On February 11, 2022, the 7th International Day of Women and Girls in Science Assembly took place in virtual format from UN Headquarters in New York. The Assembly recognized the role of women and girls in science, not only as

beneficiaries, but also as agents of change, including accelerating progress towards the achievement of SDG 6 (Clean Water and Sanitation).

(<https://www.un.org>)

The One Ocean Summit held in Brest, France

On February 11, 2022, the High-Level Meeting dubbed the “One Ocean” Summit was held in the port city of Brest in northwestern France. Participants sought ways to protect and manage the earth’s oceans. Speaking at the Summit, Antonio Guterres, Secretary-General of the United Nations, called on the international community to increase concrete action to protect the ocean from the climate crisis.

The Summit announced the “Brest Commitments for the Oceans,” which stated the participant’s collective determination on preserving biodiversity for sustainable fishing, fighting pollution, mitigating climate change, and strengthening ocean governance.

The Brest Summit is part of the second phase of the United Nations Biodiversity Conference (COP15) held in Kunming, China and preludes the upcoming United Nations Ocean Conference in Portugal. (<http://www.xinhuanet.com> and <https://articles.unesco.org>)

Women and information and communication technology (ICT): A win-win union

On April 28, 2022, the International Telecommunication Union (ITU) celebrated the 11th International Girls in ICT Day, themed “Access & Safety.”

An ITU survey on access to digital tools among girls and young women showed that less than 48 percent use the Internet today, compared to 55 percent of men. Unequal access to digital technology causes unequal access to learning, work opportunities,

social engagement, and political life.

Since 2011, International Girls in ICT Day has been observed every year on the fourth Thursday of April. The day highlights the role of young women in information and communication technologies to raise awareness of the importance of ICT as a potential career. To date, over 600,000 girls and young women have taken part in more than 12,000 celebrations of Girls in ICT Day in 195 countries worldwide.

(Written by Cristina Serra and re-produced from <https://twas.org>)

CAST is the largest non-governmental organization of scientific and technological professionals in the world. Through its 211 member societies and local branches all over the country, CAST maintains close ties with millions of Chinese scientists, engineers, and other professionals working in fields of science and technology.

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